Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. – 16. (previously cancelled)

17. – 37. (cancelled)

38. (new) A method for load limiting in an aircraft high-lift system, with the aircraft high-lift system having a branching drive system for mechanical power transmission to drive stations of individual segments of landing-flap and/or leading-edge slat systems via respective drive trains, position sensors and a drive unit, in which signals are measured by at least two position sensors, characterized by:

calculation of at least one reference variable, which represents the load in the drive trains from the measured signals;

comparison of each reference variable with a corresponding threshold value which is predetermined from a maximum permissible load; and

production of a control signal for monitored limiting of the power supply to the drive unit in the sense of limiting its drive power when at least one of the reference variables reaches or exceeds the threshold value.

39. (new) The method for load limiting as claimed in claim 38, characterized in that one of the reference variables includes at least one difference between measured signals from at least two position sensors.

40. (new) The method as claimed in claim 38 or 39, characterized in that two signals are measured with a known time interval at at least one position sensor.

41. (new) The method as claimed in claim 40, characterized in that one of the reference variables includes a function of the angular velocity.

42. (new) The method as claimed in claim 40, characterized in that one of the reference variables includes a function of the acceleration.

43. (new) The method as claimed in claim 41, characterized in that one of the reference variables includes a function of the acceleration.

44. (new) The method as claimed in claim 38, characterized in that one of the reference variables uses a calculated load.

45. (new) The method as claimed in claim 38, characterized in that the drive power of the drive unit is determined.

46. (new) The method as claimed in claim 38, characterized in that signals from position sensors which are located at each of the ends of the drive trains and from an angle position transmitter which is located on the drive unit are detected, and the at least one reference variable, which represents the load in the drive train, is calculated from the signals.

47. (new) The method as claimed in claim 46, characterized in that a signal comparison is carried out between respective subsystems which are associated with the port and starboard wings and each comprise a drive train, a position transmitter which is located at the end of the drive train, and the angle position transmitter which is located on the drive unit.

48. (new) The method as claimed in claim 46 or 47, characterized in that signals from position sensors which are provided on branching transmissions of the drive trains are additionally used in order to calculate the at least one reference variable which represents the load in the drive train.

49. (new) The method as claimed in claim 38, characterized in that the drive power of the drive unit is limited in a highly dynamic manner using the control signal.

50. (new) The method as claimed in claim 38, characterized in that a threshold value is predetermined appropriately for an operating state.

51. (new) The method as claimed in claim 38, characterized in that one of the reference variables includes a function of a state variable, which is estimated by means of mathematical methods, from a group comprising position, velocity and load.

52. (new) An apparatus for load limiting in an aircraft high-lift system, with the aircraft high-lift system having a branching drive system for mechanical power transmission to drive stations of individual segments of landing-flap and/or leading-edge slat systems via respective drive trains, position sensors and a drive unit , characterized in that the apparatus has a monitoring unit for load limiting which is connected to the position sensors and is designed to process signals from the position sensors and, by comparison of at least one reference variable which represents the load in the drive trains with a corresponding threshold value which is predetermined from a maximum permissible load, to produce a control signal for monitored limiting of the power supply to the drive unit in the sense of limiting the drive power that is supplied.

53. (new) The apparatus as claimed in claim 52, characterized in that the position sensors have an angle position transmitter on the drive unit, and/or angle position transmitters, which operate as asymmetry transmitters, at the ends of the drive trains.

54. (new) The apparatus as claimed in claim 52 or 53, characterized in that the position sensors have angle position transmitters on branching transmissions of the drive trains.

55. (new) The apparatus as claimed in claim 52 or 53, characterized in that position sensors which are located at each of the ends of the drive trains and an angle position transmitter which is located on the drive unit are provided, and in that the monitoring unit is provided in order to calculate the at least one reference variable, which represents the load in the drive train, from its signals.

56. (new) The apparatus as claimed in claim 54, characterized in that position sensors which are located at each of the ends of the drive trains and an angle position transmitter which is located on the drive unit are provided, and in that the monitoring unit is provided in order to calculate the at least one reference variable, which represents the load in the drive train, from its signals.

57. (new) The apparatus as claimed in claim 55, characterized in that the monitoring unit is provided to carry out a signal comparison between respective subsystems which are associated with the port and starboard wings and each comprise a drive train, a position transmitter which is located at the end of the drive train, and the angle position transmitter which is located on the drive unit.

58. (new) The apparatus as claimed in claim 56, characterized in that the monitoring unit is provided to carry out a signal comparison between respective subsystems which are associated with the port and starboard wings and each comprise a drive train, a position transmitter which is located at the end of the drive train, and the angle position transmitter which is located on the drive unit.

59. (new) The apparatus as claimed in claim 55, characterized in that position sensors are additionally provided on branching transmissions of the drive trains, and their signals are used in order to calculate the at least one reference variable which represents the load in the drive train.

60. (new) The apparatus as claimed in claim 56, characterized in that position sensors are additionally provided on branching transmissions of the drive trains, and their signals are used in order to calculate the at least one reference variable which represents the load in the drive train.

61. (new) The apparatus as claimed in claim 57, characterized in that position sensors are additionally provided on branching transmissions of the drive trains, and their signals are used in order to calculate the at least one reference variable which represents the load in the drive train.

62. (new) The apparatus as claimed in claim 58, characterized in that position sensors are additionally provided on branching transmissions of the drive trains, and their signals are used in order to calculate the at least one reference variable which represents the load in the drive train.

63. (new) The apparatus as claimed in claim 52, characterized in that the power of the drive unit can be controlled in a highly dynamic manner.

64. (new) The apparatus as claimed in claim 52, characterized in that a shaft section of defined high flexibility is arranged between the drive unit and the first branching transmission.